

In the claims:

Please amend the claims as follows:

A1
Claim 1 (currently amended): A method of receiving data from a network, comprising: issuing a ~~receive~~ request directing a transfer of data from one of a plurality of device ports to a ~~buffer memory storage unit~~ and specifying a thread from among a plurality of processing program threads to process the data.

Claim 2 (currently amended): The method of claim 1, further comprising: determining if any at least one of the plurality of device ports coupled to the network require service.

Claim 3 (currently amended): The method of claim 2, further comprising: transferring the data to the ~~buffer memory storage unit~~ and signaling to the specified program thread that the data is ready for processing.

Claim 4 (original): The method of claim 2, wherein determining comprises: interrogating the plurality of device ports to identify which of the plurality of device ports require service.

Claim 5 (original): The method of claim 4, wherein determining further comprises: preparing control information corresponding to those device ports identified as requiring service.

Claim 6 (currently amended): The method of claim 5, wherein the control information comprises ~~receive ready flags indicators~~ each associated with a device port receive FIFO in a corresponding one of the device ports.

Claim 7 (currently amended): The method of claim 6, wherein interrogating comprises:

polling the state of the ready flags to determine if the ~~ready flags~~ indicators are asserted, the assertion of the ~~ready flags~~ indicators indicating that the corresponding device ports have data ready for transfer.

A2

Claim 8 (currently amended): The method of claim 7, wherein the ~~receive ready flags~~ indicators indicate that the associated device port receive FIFO has reached a threshold level of fullness.

Claim 9 (currently amended): The method of claim 8, wherein the ~~receive ready flags~~ indicators indicate that the associated device port receive FIFO stores a full network packet.

Claim 10 (currently amended): The method of claim 5, further comprising: maintaining a receive ready count, the receive ready count being incremented when in response to the control information is being prepared.

Claim 11 (original): The method of claim 5, wherein preparing control information further comprises:

writing a flag to a control and status register for each device port in the plurality of device ports that is determined to require service.

Claim 12 (original): The method of claim 11, wherein issuing comprises: obtaining the control information from the control and status register; and selecting from each device port in the plurality of device ports having set bits in the control and status register a port for servicing.

Claim 13 (original): The method of claim 12, wherein issuing further comprises: determining which among the plurality of program threads is available; and assigning an available program thread to the selected port.

Claim 14 (original): The method of claim 12, wherein selecting a port comprises:

using the receive ready count to determine if the ready flags reflect current status of the device port.

A2

Claim 15 (currently amended): The method of claim 3, further comprising:
maintaining a receive request count for counting transfer of data to the ~~buffer memory storage unit~~, the receive request count being incremented by one upon the transfer of the data to the ~~buffer memory storage unit~~ and signaling to the specified program thread.

Claim 16 (currently amended): The method of claim 15, wherein selecting a port further comprises:

using the receive request count to determine if the ~~ready flags indicators~~ reflect current status of the device ports.

Claim 17 (original): A method of receiving data from a plurality of peripheral ports, comprising:

determining that the one of the plurality of peripheral ports requires servicing;
issuing a receive request based on the determination, the receive request directing the transfer of data from the one of the plurality of peripheral ports to a buffer memory and specifying a program thread from among of a plurality of processing program threads to process the data; and

transferring the data to the buffer memory and signaling to the specified thread that the data is ready for processing.

Claim 18 (currently amended): An article comprising a computer-readable medium which stores computer-executable instructions for receiving data from a plurality of ports, the instructions causing a computer to:

issue a receive request directing a transfer of data from one of a plurality of device ports to a ~~buffer memory storage buffer~~ and specifying a program thread from among a plurality of processing program threads to process the data.

Claim 19 (currently amended): The article of claim 18, the article further comprises instructions causing a computer to:

determine if any at least one of the plurality of device ports coupled to the network

A2 require service.

Claim 20 (currently amended): The article of claim 19, the article further comprises instructions causing a computer to:

transfer the data to the buffer memory storage unit and signal to the specified program thread that the data is ready for processing.

Claim 21 (original): The article of claim 19, wherein the instructions to determine comprise instructions causing a computer to:

interrogate the plurality of device ports to identify which of the plurality of device ports require service; and

prepare control information corresponding to those device ports identified as requiring service.

Claim 22 (currently amended): The article of claim 21, the article further comprises instructions causing a computer to:

maintain a receive ready count, the receive ready count being incremented when in response to the control information is being prepared.

Claim 23 (original): The article of claim 22, wherein the instructions to issue comprise instructions causing a computer to:

use the receive ready count to check the current status of the device port.

Claim 24 (currently amended): The article of 19, the article further comprises instructions causing a computer to:

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Page : 6 of 8

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AZ maintain a receive request count for counting transfer of data to the ~~buffer memory storage unit~~, the receive request count being incremented by one upon the transfer of the data to the buffer memory and signaling to the specified program thread.

Claim 25 (original): The article of claim 24, wherein the instructions to issue comprise instructions causing a computer to:

use the receive request count to check the current status of the device ports.

Claim 26 (withdrawn)

Claim 27 (withdrawn)

Claim 28 (withdrawn)